THE

DOCTOR IN THE SCHOOLS

BEING

NOTES ON THE MEDICAL INSPECTION OF PUBLIC ELEMENTARY SCHOOL CHILDREN UNDER THE EDUCATION (ADMINISTRATIVE PROVISIONS) ACT, 1907.

BY

HACKWORTH STUART, M.D. Lond.
F.R.C.S.E., D.P.H. Cantab.

MEDICAL OFFICER TO HANLEY EDUCATION COMMITTEE; MEDICAL OFFICER TO THE STAFFORDSHIRE INDUSTRIAL SCHOOL, WERRINGTON.

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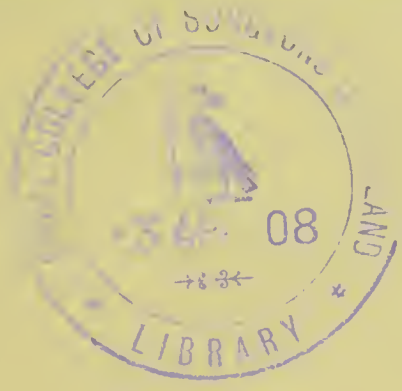

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PREFACE.

The object of this paper is to place at the disposal of School Managers, Teachers, and others interested in educational administration, a few notes based on some years of medical inspection of Elementary School Children; and also to aid Medical Officers newly appointed under the Education (Administrative Provisions) Act, 1907, in formulating schemes of inspection. Any opinions here expressed are not to be taken as official.

I have the good fortune to live in one of those areas —forty-seven in number, outside the Metropolis—whose education authorities had realized that their powers to provide for the medical inspection of their school-children involved an important public duty, and had acted accordingly, some years before the recent legislation rendering medical inspection compulsory from January 1st, 1908.

It is now nearly four years since the Hanley Committee appointed a Medical Officer. This paper is based largely on the experience of that time.

THE DOCTOR IN THE SCHOOLS.

THE overwhelming mass of evidence as to the need for the medical inspection of school children throughout the country has at length borne fruit in section 13 of the Education (Administrative Provisions) Act, 1907.

Many different schemes of inspection have been in use by those Education Authorities who have anticipated the Act in virtue of earlier permissive legislation. The means by which the best results will be secured are by no means settled.

Some uniformity of method may now, however, be looked for, in response to the Memorandum on Medical Inspection issued by the Board of Education (Circular 576). Schemes adopted by various Authorities will now differ largely only in degree of development, while agreeing in principle and in the chief objects of inspection.

In working out a satisfactory scheme it is needful to keep in view the primary objects, and not be tempted to unduly enlarge the field of investigation, to the sacrifice of any part of that vast amount of definite practical work which lies close at hand and calls for immediate attention.

The false argument for medical inspection is this:—

If the State undertakes compulsory education of children, it must also undertake to feed them, to clothe them, and to tend them in sickness. On these very lines Herbert Spencer inveighed against the whole system of education by School Boards.[1] State education having outlived such criticism, the old argument is now heard from the lips of unwise Socialistic educationists in support of various schemes which make for the total removal from parents of the responsibility for their children: whereas *one of the foremost objects of a sound scheme is that of bringing home to the parents their responsibilities*, where physical defects occur in their children.

Compulsory education presupposes,[2] first, that the child is mentally and physically fit to be educated; and secondly, that after his State education is completed, he is capable of remaining fit for the duties of civil life, and so repaying the State for his training.

If a child is not educable on ordinary lines by reason of some defect, this must be removed or ameliorated; and if that be impossible, the child must be liberated from the usual school routine. In this way most children will be rendered as far as possible educable, while some will be safe-guarded from the over-pressure of unsuitable instruction, and the public funds will be insured against waste on unproductive expenditure.

All this necessitates medical inspection. The sanitary condition of schools, and infectious diseases of children in relation to the public health, might well remain under the supervision of the medical officer of health, allowing the school doctor to concentrate his attention on the more personal objects of inspection;

the work of each of these officials forming a distinct section of preventive medicine.

At present any satisfactory scheme must give second place to the compilation of statistics for anthropometric survey, as compared with the practical aim of securing relief from physical defects which render children unfit for school life and cause waste of public money.

At the same time, great value may be attached to a reliable record of the physical condition of the children of the nation as an index to that of the nation itself—the need for the latter being quoted by a strong supporter of Conscription as a powerful argument in its favour. It is much wiser to secure this record at an age when the physique is plastic, than at military age.

ORGANISATION.

In accordance with the new Act, every Local Education Authority must appoint a Medical Officer to carry out the duties of medical inspection.

The Policy of the Board of Education is to work the inspection through the Medical Officer of Health's department.

Where circumstances are such that the Medical Officer of Health is able to undertake the duties himself, he may become responsible to the Local Education Authority for the discharge of these.

But there are many questions worth considering beside the practical and economical convenience of this policy. An officer who has devoted himself to the broad issues of Public Health may have sacrificed the more clinical instincts requisite for dealing with the individual child

and rarely will he have been able to take up in addition the study of defects of the special sense organs which bulk so largely in the work under consideration.

Where the Medical Officer of Health needs an assistant to carry out the inspection of children, the latter will be appointed by, and become the executive officer of the Local Education Authority, while at the same time he is responsible to, and acting under the direction of, the executive officer of the Local Sanitary Authority. The question arises whether such an Education Medical Officer is responsible to the Board of Education or to the Local Government Board.

Time and experience will no doubt allow of the adjustment of such matters. The course which appeals to some who have already had experience is this—let the Local Education Authority appoint and retain its own independent Medical Officer for inspection purposes, and direct him to confer with the Medical Officer of Health on all matters relating to sanitation and infectious diseases in schools.

In the actual process of inspection and recording results, very large numbers of children have to be dealt with. It is only with the hearty co-operation of the teachers, and, as far as possible of the parents, and the reduction of the mechanical and clerical processes to a minimum, that sufficient time can possibly be given to practical individual examination.

METHODS OF RECORD AND NOTIFICATION.

The permanent record in each school may best take the form of a card-index. This will prevent much over-lapping and reduplication of work, particularly in

a shifting population. On removal or promotion any scholar's card may follow him. Each scholar's card, the name, age, and address having been filled in by the Head Teacher, should contain a printed form on the lines of the headings for examination supplied in the Board's Memorandum.

(1) Previous disease, including infectious diseases.

(2) General condition and circumstances:—
- (*a*) Height and Weight
- (*b*) Nutrition
- (*c*) Cleanliness { i. Dirt / ii. Vermin
- (*d*) Clothing:—
  - i. Sufficiency
  - ii. Cleanliness
  - iii. Boots

(3) Tonsils
Adenoids
Nasal Obstruction
Enlarged Glands
Stammering

(4) External Eye Disease
Vision

(5) Ear Disease
Deafness

(6) Teeth

(7) Mental Capacity

(8) Skin Diseases

(9) Underline any of the following if present.
(*a*) Deformities or paralyses. (*b*) Rickets.

(*c*) Tuberculosis (glandular, pulmonary, osseous, &c). (*d*) Diseases of heart or lungs. (*e*) Anæmia. (*f*) Epilepsy. (*g*) Chorea. (*h*) Ruptures. (*i*) Spinal disease. (*j*) Any weakness or defect unfitting the child for ordinary school life or physical drill, or requiring exemption from special branches, or special supervision.

Certain of the above defects will be more frequently noted at the inspection on admission, others at later periods. The forms will be best set out so that a mark is sufficient to indicate any defect present.

This form will be suitable for recording the results of inspection on admission, at the seventh year, the tenth year, and on leaving school.

The Medical Officer's personal diary of work, entered up at each visit, will afford the matter for his Reports.

An examination on these lines, with the assistance of the teacher and of a parent if possible, need not take many minutes for each child. A private room or empty class-room is advisable. The presence of a parent is most desirable if it can be secured, as it is a valuable aid in getting carried out any advice given to secure treatment for defects discovered and notified to the parent. Here is one of the great difficulties of the work, if treatment is to be obtained without removing parental responsibility.

Visits to the classes are useful for noting the ventilation, heating, lighting; position and construction of desks; posture, drill, and breathing exercises.

Any defects found are notified to the parents by means of explanatory printed forms, the best of which is a small card, with a perforated slip attached, which the parent is requested to sign, in acknowledgment of

the notice, and as a promise to proceed with the recommendations made in the notice :—

HANLEY EDUCATION COMMITTEE.

NOTICE OF DEFECTIVE EYES (SQUINT).

To the parents or Guardians of

This child has been examined by the Medical Officer who reports the above defect. You are advised to secure medical advice, without delay, as to wearing proper spectacles, and other means of relief. A squinting eye if neglected rapidly loses its sight, and this cannot be restored after a very early age, hence the need for immediate attention.

.....

I have read the notice from School and will at once carry out the advice given.

Signed

Date

Notification forms on these lines are needed for each of the following :—

Defective sight
External eye diseases
Squint
Running ears
Deafness
Mouth breathing due to
Bad Teeth
Enlarged Glands
Nits

Want of Cleanliness (neglect)
Clothing, insufficient or unclean (neglect)
Skin disease
Requires Medical Treatment until well on account of .....
Unfit for School.

Experience proves that a bald statement of defect will not secure much attention from the parents concerned. Explanatory information must be sent for this reason, and the numbers dealt with will not allow of such being written.

Defective sight does not occur largely in the infants examined on admission. The most numerous cases at this age are those of Squint and of Opacities of the Cornea left from former ulceration. Conditions of active inflammation or ulceration require, of course, temporary exclusion from school. The Convergent Squint of children is in most cases associated with Hypermetropia, on the top of which Astigmatism may exist, and either or both of these may be of greater degree in one eye, and determine the side of a fixed Squint. The immediate cause of Squint in these cases is the non-development of the fusion sense—a psychical factor essential to binocular vision.

If binocular vision is not present the perception of solidity, depth (perspective), and distance is very deficient.

The absent fusion sense can be developed by training, but only at a very early age, probably before 8 at the latest. An eye with a fixed squint gradually loses more and more of its vision, and becomes blind; and it is only at an early age that this process can be checked and any restoration hoped for. Hence the great importance to be attached to drawing attention to these cases

early in life, when the correction by glasses of refractive errors may produce the most beneficial result, and allow of amblyoscopic (Worth) training of the fusion sense, while that is still possible. Operation on squinting eyes later in life may improve the appearance, but it is then too late to hope for improvement in the lost sight or fusion sense. Cases of squint should be treated as early as possible, and here we have a ready means of drawing the attention of parents to this need.

Vision testing by means of types is not applicable to infants on admission, nor is such testing necessary. Cases of Myopia (short sight) are found developing at the age of the second examination (7 years) and Hypermetropia and Astigmatism declare themselves by signs of eye-strain as school work becomes serious. Such cases may well be reported at visits made by the medical officer for admission inspections, and should certainly not wait for the routine second examination, as Myopia often increases to an alarming degree during school years; whereas any degree of development that can be saved during school years is less likely to increase much afterwards.

External eye diseases are often an indication of eye-strain needing relief by glasses; they also need attention from the point of view of possible infection.

A set of test type for distant and near vision is needed in each school, and Teachers soon appreciate their preliminary use.

Dunn's Chromatic Disc* is a useful adjunct in testing.

The *Deafness* met with in schools is mostly due to:— (1) Previous inflammation of the middle ear, spreading from the throat during attacks of Scarlet Fever or

* Made by F. Davidson, 29 Great Portland Street, W.

Measles. (2) The same cause as the former with persistent running of the ears. (3) The co-existence of causes removable by operation, in the nose or throat, such as adenoids, turbinate hypertrophy or enlarged tonsils.

Notices of the last group, explaining their effect not only on the hearing but also on the general, mental, and respiratory development, generally induce the parents to secure treatment. There is no condition, however, amongst children, more commonly neglected than that of running ears. This discharge itself is a very fertile source of disease.

Rising from their soiled pillows with dried discharge about their hair, these children come to school to spread trouble among their mates by contact and by poisoning the air they have to breathe. Exclusion from school is not helpful in securing treatment, as the children are only too useful at home.

One reason for the difficulty here is the amount of perseverance required in, and the comparative ineffectiveness of, the routine treatment most commonly meted out to such cases. Should School Clinics become developed, those in charge, keeping in touch with numbers of children throughout school life, will have an opportunity of formulating the most effective methods for dealing with this trouble and its concomitants, and of judging of the final results achieved by "Otectomy" lines of treatment as compared with modified "Mastoid" procedures. No medical man would now condone non-treatment of running ears, or lend support to the hope of growing out of a condition which is a constant source of danger to the life of the possessor, as well as a depressing influence on the health of those around.

Next to defects of sight this condition is one of the most common in school children; it is by no means to be neglected, and a great deal of persevering representation to the parents, before they can be persuaded to act in the matter, is usually required.

The manner in which Life Insurance Companies regard this affection, either in activity, or as a matter of past history, should be more widely known.

Mouth Breathing, either as a habit, or brought out during the forced breathing of the respiratory exercises conducted in schools, is a common indication of some obstruction of the Nose and Throat, such as turbinate hypertrophy, septal deflections, nasal polypi, adenoids, or enlarged tonsils.

Obstruction to free breathing through the nose leads to deformity of the nose, face, roof of mouth, and chest, together with mal-development, physical and mental; such obstruction requires removal at as early an age as possible.

Some works on the hygiene of youth give excellent pictures of the effect of adenoids on the facial conformation, but by the time such a condition is present, and to be used as a means of discovering the presence of adenoid obstruction, much harm has been done, and is being added to with every phase of development; and it is *already too late* to remove the obstruction by operation with the best possible results. One object of inspection should be the discovery and early removal of such conditions, before they have time to produce deformity.

Defects of Articulation may be caused by missing teeth which nature will supply; to physical defect of the mouth, tongue, or throat; or to a nervous element, as in the case of stammering. I have been very much

struck by the results obtained in such a case if the child can once be got to grasp the principle[4] of slow speech and deep inspiration before phonation; my directions being "read slowly, syllable by syllable; taking a deep breath before you speak, at every stop, and whenever you feel like stammering." Some Education Authorities have found it expedient to form special classes of Stammerers, for treatment and curative instruction by those who have made a special study of applicable methods.

Bad Teeth certainly need attention under this scheme of inspection. The subject has not received much practical attention under the schemes already in vogue. But it is the magnitude of the subject, rather than the non-recognition of the need, which has allowed it to rest, while more important, if relatively less common, defects have been dealt with. Teaching the children to clean their teeth is a beginning, but practical dental work is needed, not stopping at inspection merely. No medical officer who is responsible for the inspection of any considerable number of children will be able to give much time to issuing instructions about the teeth in individual cases.

The British Dental Association submitted a Memorandum[4] on this subject to the Commission of the Board of Education on Medical Inspection and Feeding, based on the examination by Dentists of children in various schools. This showed the great need for the appointment of competent Dentists by School Authorities, to inspect and remedy defects of the teeth. Poor-Law Schools already have Dental Officers. The pauper child is better provided with dental advice and treatment than the child of the class immediately above in the social scale. The neglect of the teeth in this class is one reason why the Army loses so many recruits.

In 1903, 63 per thousand recruits were rejected for dental defects, 10 per thousand in excess of the next most frequent cause, "under-chest measurement."

Enlarged Glands may be tuberculous, but are most commonly caused by bad teeth, nits in the hair, or skin disease, and are classified according to the cause. Nits in the hair, often associated with scabby sores in the head (Impetigo), and contagious skin diseases (Ringworm, Impetigo, Itch), give rise to a great deal of trouble in schools.

Present methods of preventing the spread of ringworm and allied contagious diseases of the skin need considerable amplification. It is incumbent on Authorities to at least prevent, as far as possible, the contamination of healthy children in Government Institutions which they are forced to attend, if not to treat such cases as have presumably been contracted there.

Nits in the hair give rise to disease of the scalp, skin, eyes, and to enlarged glands in the neck, besides indicating a low standard of personal hygiene.

Much may be done in the way of prevention and protection by the principle of Segregation during school hours. This not only checks the spread of such troubles, but brings home their neglect to the parents, who are stirred up to action by it in a way that even the terrors of the law fail to secure.

The Teachers are instructed to place all the children in each class suffering in this way together, reserving perhaps the front row of desks for them; moreover, during school hours these cases must not go into the playground. The teachers are supplied with two sets of notification cards for parents, one with directions, for getting rid of Nits, the other notifying the need for

medical treatment of skin diseases, either card notifies also the disability of Segregation under which the child is living at School until cured.

Any doubtful cases must first be referred to the Medical Officer.

HANLEY EDUCATION COMMITTEE.

To the parent or Guardians of

This child is suffering from a skin disease, for which you are advised to secure Medical Treatment at once.

It is very important to prevent children from giving ailments to one another. This child will therefore be separated, during school hours, until well, from those who have no ailment.

A perforated slip is attached, as in the example already given, and also in the case of the card notifying nits, which has on the back directions for destroying these by the paraffin method noted on the large Educational Slip described later.

Cases certified at School as unfit to attend are often thereby consigned to continuous neglect, unless frequently inquired after by Attendance Officers. Where possible, better results are secured by keeping them at school, under observation, on the above plan of Segregation. Teachers who are keen can do wonderful things with the children, in such matters as cleanliness of person and clothing. Insufficient clothing or foot-gear needs different measures according to whether it is due to neglect or to poverty, as suggested later under voluntary agencies (p. 30).

Amongst children certifiable as unfit for school life is a large class with defects of sight and hearing too great for them to be rendered educable in ordinary classes. It is essential that every Authority should have access to a Special School, for such *blind and deaf children* from its area. This will necessarily be usually a residential school on account of the extent of the district it serves.

In addition to children suffering from defects such as those already mentioned, one has to deal with two classes of defect for which some special provision is needed, and which shall afford both protection and special methods of instruction.

These are, first, *children who are crippled* by the results of infantile paralysis, diseases of bones or joints, or who have a delicate constitution from some other cause; and secondly, *mentally defective children.*

The London Authority has of course made provision for these cases, and the report of that work makes wonderfully interesting reading. Liverpool has special schools, which I mention, because there, as in London, separate centres for teaching physically and also for mentally defective cases were started; but further experience has shown the advantage of double centres, where both physical and mental cases are taught, in the same building and by the same staff, but of course in separate departments; and it is proposed to make any further provision only on the double principle. The results on the physical are much more encouraging than on the mental side.

Under *mentally defective* are classed those cases which are too bad to make progress under the ordinary methods of instruction, but likely to improve by special methods. These defective children have a very bad

effect on the normal children; they upset the discipline of the classes where they are; they set a bad example and cannot be corrected like other children; they are a source of distraction to the other scholars who instead of attending are continually watching them for a display of fantastic tricks; and they divert the teacher's efforts from the proper objects.

Moreover, the mentally defective children derive no benefit from sitting under instruction in which they can take no part. . .

If these defective children belonged to a higher social grade, they would never be sent to a public school at all, in their present condition.

For these reasons I think it may be fairly granted that mentally defective children should be excluded from the ordinary classes.

The question next arises whether it would be well to stop short here, or whether some special provision should be made in the nature of special classes with special methods.

If these children belonged to a higher social grade, not only would they not be sent to a public school, but special provision would be made at home, for their development on special lines.

If these children are excluded from ordinary classes largely for the sake of the others, it follows that something may be expected for their own sakes in the form of special classes. It seems only reasonable that any education scheme should not neglect to provide for the needs of so large a section of the children as this is. The benefits which are derived from special classes for mentally defective children, and which may be regarded as reasons for considering the advisability of establishing such classes are :—

(*a*) A certain proportion of the members of special classes improve sufficiently to be sent back to ordinary school. This may not be a large proportion, and, of course, varies with the degree of mental defect adopted as the standard of admission to the special classes.

(*b*) A number of cases, who would otherwise come on the rates later, have increased chances of becoming self-supporting, even if they remain permanently mentally deficient.

(*c*) A certain proportion, who will inevitably come on the rates sooner or later, will have the age at which that happens postponed.

(*d*) Criminal tendencies are less likely to develope where the instruction is such that habits of discipline and occupation are instilled; this does not happen with these children in ordinary classes. The ranks of women of loose character are very largely recruited from the feeble-minded.

Special education of the feeble-minded has been tried on a large scale not only in this country, but also for a longer time in France, Germany, Switzerland, Norway, and many of the States of America. The experience of these countries is that many children, who have been considered hopeless in the ordinary schools, have been enabled, owing to the instruction given to them in special schools, to commence and follow out useful careers, which is the object of all our elementary education.

The points secured in special classes are:—

(*a*) Small classes, limited to fifteen, and allowing special individual attention in ground-work such as the development of ideas of articulation, word-building, form, and number.

(*b*) In the place of the more advanced subjects of the

time-table, the substitution of practical lessons and physical exercises, to develop the faculties most essential to self-support.

(*c*) Short school hours and short lessons until some power of concentration has been developed.

The cost of special classes, if sufficient accommodation is already available, would be practically limited to the expense of the extra teaching involved by small classes. It is probable that better use might be made of the accommodation for infants under five years, where this is still provided, by devoting some of it to this object. There are grounds for hope that further experience may justify the general adoption of provision for the special teaching of both the physically and mentally defective.

There is a general tendency to unduly press the promotion of children from the infant departments according to age, instead of capacity. By rushing a child upwards into surroundings and teaching for which it is still unprepared, any slight mental weakness may easily become more pronounced, through undue pressure in the case of a sensitive child, or by producing apathy in a lethargic one. This should be borne in mind by Inspectors, who criticise infant mistresses for retaining children who, on age alone, might be considered unsuitable for an Infant Department.

Of the County Boroughs, the following have made special provision for mentally defective children :— Bolton, Birkenhead, Birmingham, Blackburn, Bradford, Bristol, Brighton, Burnley, Cardiff, Derby, Devonport, Halifax, Leeds, Leicester, Liverpool, Manchester, Newcastle-on-Tyne, Norwich, Nottingham, Oldham, Plymouth, Reading, Sheffield, and Wolverhampton.

The Authorities which make arrangements for the

admission of cases in their area to special schools and institutions belonging to other Authorities are:—Bootle, Bournemouth, Chester, Gateshead, Salford, Stockport, and Wigan.

Those having the matter under consideration are:—Burton-on-Trent, Coventry, Hanley, Hastings, Huddersfield, Hull, Lincoln, Rotherham, Swansea, and Southampton.

The assistance afforded in educational quarters by medical opinion is well shown by the recent change of attitude towards Infant Schools. It has been represented to various Education Authorities, that routine schooling, for children under 5, is not only of no benefit educationally, but is detrimental developmentally, and as a means of spreading infection at the most susceptible age periods.

On these grounds, as well as those of economy, numerous education committees are now ceasing to allow parents the option of sending their babies under 5 to school, no fresh scholars under age being admitted, although those already attending may continue to do so. When this step is completed, a further movement in the same direction may well be advised by the profession—that of instituting morning attendance only for children from 5 years (at which age attendance becomes compulsory) to 8.

The first result of this non-admission in Hanley was a marked improvement in the attendance figures. The very susceptible under 5 population not coming to school to spread infection amongst themselves, their older brothers and sisters were saved from being kept at home as contacts. This at least is how we explained the improvement until a recent widespread epidemic of Measles upset all calculations.

It is useful to *interest and educate the parents* in any area in the subject of defects common at school age, and this end may be served by the distribution of cards in permanent form, either in the homes, or at the time of inspection, containing information on the lines suggested by Dr. Rushton Parker in the *British Medical Journal*.

One immediate result has been an increased interest in the recommendations made by the Medical Adviser, in the course of Inspection, to secure the correction of defects. The effect of this has been so helpful that I include the text of the card referred to, which is printed in large type and of foolscap size, and has an attachment ready for hanging up.

HANLEY EDUCATION COMMITTEE.

DEFECTS IN SCHOOL CHILDREN WHICH REQUIRE IMMEDIATE ATTENTION.

It having been found that a large number of school children have their education seriously interfered with by a number of common complaints, many of which may be remedied, the attention of parents is earnestly drawn to the following points.

Children are examined in the Schools by the Committee's Medical Adviser; immediate attention should be given to recommendations made by him.

(1) EYESIGHT.

Every scholar needs good sight in both eyes.

Children with faulty sight, by continually straining their eyes, become liable to headache, squint, and sore eyes.

Sore eyes, squint, and headache may often be prevented and cured by wearing proper spectacles.

If a "cast in the eye" is neglected, the squinting eye gets gradually weaker and at last blind. The squint can then be cured only by an operation; and even this will not cure the blindness.

Parents whose children have faulty sight, or sore eyes, or a "cast in the eye" (squint), or frequent headaches, should consult their Doctor, to see if spectacles or other remedy be needed.

(2) HEARING.

Every scholar needs good hearing in both ears.

Earache often leads to discharge from the aching ear; and a neglected discharge often leads to deafness, and sometimes to serious brain disease.

Parents whose children have earache, or an ear discharge, or are at all deaf, should consult their Doctor before any serious damage arises.

(3) BREATHING WITH OPEN MOUTH.

Everybody should breathe through the nose, not through the mouth; the air thus gets warmed before it reaches the lungs. In school-drill, children are taught to breathe deeply with the mouth closed.

Children who breathe with open mouth have for a long time previously suffered from either large tonsils or some blockage in the nose, which has caused a thick voice, enlarged glands in the neck, or a badly shaped chest ("pigeon chest").

Breathing with open mouth causes a tendency to colds, sore throats, deafness, headache, a vacant look, and stupidity.

Parents whose children breathe with open mouth, or have large tonsils, or a blockage of the nose, or who frequently catch cold, or who have enlarged glands in the neck, or a badly shaped chest, should consult their Doctor at once, for the health may be greatly improved by removing the obstruction.

(4) DECAYED TEETH.

When food is left between the teeth it goes sour, and causes decay of the teeth; and when a decayed tooth is neglected, the decay spreads to the neighbouring teeth. Decay also spreads from the temporary or milk teeth to the permanent set.

If the mouth is rinsed with water after every meal, no food is left to go sour, and decay is prevented.

Teeth are best scrubbed morning and evening, but especially on going to bed, so as to prevent bits of food between the teeth going sour and causing decay during the many hours of sleep.

If decayed teeth are neglected, the decay spreads gradually to all the teeth. Decayed teeth cause tooth-ache, neuralgia, indigestion (from want of proper chewing of the food), and various illnesses caused by swallowing the poisons they contain.

(5) SHORTNESS OF BREATH, HABITUAL COUGH, FRAILTY, DEFORMITY, FITS.

An important part of children's education consists of outdoor games, swimming, drill, and other exercises; and, in order to get the full benefit of these every child needs a sound heart, sound lungs, good general health, freedom from deformity, and freedom from fits.

Parents whose children get out of breath from too

slight a cause, or are troubled with habitual cough, or are weak and frail and pale, or have any deformity (such as bow leg, knock knee, club foot, flat foot, hip disease, curved spine), or are subject to faints or twitchings or fits, should consult their doctor without delay, as special precautions may be needed about games and other exercises, clothing or food.

(6) RINGWORM, SORE HEAD, HEAD-LICE, SCABBY FACE, ITCH.

It is very important to prevent children from communicating their ailments to one another.

Head-lice and nits are exceedingly common in children. Boys' heads are best kept closely cropped. To destroy lice and nits, the hair should be kept wet with paraffin for several hours and then washed with soap and water; the same should be done next day and the day after, care being always taken not to bring a naked light near the paraffin; then the hair should be combed daily with a very fine comb, soaked in vinegar till no more nits can be found. Children should not exchange caps.

Ringworm often takes months to cure; children, with doctor's permission and under proper treatment, may mix with other children and even attend school if they continually wear some kind of cap until certified as cured.

Parents, whose children suffer from ringworm, scabby sores (crusts) on the head or face, itching spots on the hands or wrists, or any complaint that might possibly be communicable to another child, should consult their doctor at once, as most of these complaints are much more easily cured in the early stage.

THIS CARD SHOULD NOT BE LOST OR DESTROYED.

The first point of enquiry on the examination form—that of *history of previous diseases*, including infectious disease, forms a record of great use in epidemic periods.

In an epidemic of Measles for instance, instead of the need for general school closure arising, it may suffice to close the Infant Schools, while excluding, in the Upper Departments, only those unprotected by a previous attack.

The importance of *routine cleansing and disinfection of school premises* cannot be too strongly emphasised, and this should be especially thoroughly carried out before re-opening school after an epidemic.

Sufficient attention is not paid to dust in schools as a factor in the dissemination of disease.

Routine cleaning of Schools is apt to resolve itself into a perfunctory sweeping of floors and occasional readmission of daylight. Where so many possible channels of disease meet, special efforts should be made to remove all dust and dirt, and any plans devoted to rendering the construction of schools such that this is easily, quickly, and effectively done are bound to result in good. Those principles which guide us in Hospital Buildings, to provide concrete floors, tiled walls, and rounded corners, where the application of a hose is a simple matter, might well be applied with suitable modification to school buildings. Wall maps should be made like spring blinds to close up in dust proof cases when not in actual use, and black-boards should be cleaned with damp cloths.

To inspect and advise is one thing but to get the advice carried out is quite another. The first practical result anticipated in any scheme is at the same time most difficult to secure.

Every Authority which has so far undertaken Medical

inspection has experienced great difficulty in overcoming parental indifference and neglect, in very many defective cases; in some of these it is at present impossible to persuade the parents to act on the notification made after the visits of inspection.

Legal proceedings against the parents for neglect would not prove a very helpful custom for general adoption.

I can only suggest that inspection would become much more fruitful in results if Education Authorities were empowered to secure treatment of cases where the recommendations of the Medical Inspector are repeatedly neglected, and to recover the cost from the parents.

The memorandum mentions the subject of specific Medical treatment as one which will require subsequent consideration in the light of the findings of Medical Inspection and the collateral issues raised thereby, and states that it is clear that Local Educational Authorities will be unable to formulate and submit for the Board's sanction any comprehensive scheme for the furtherance of this object until they have considered the results of their Medical Inspection in various directions. It is however a fact that many Authorities have gone as far as discovering a need for some such powers; and this suggestion of an open door, as far as the Board is concerned, will no doubt produce activity in this direction on the part of those Authorities who have already done pioneer work in the direction of Medical inspection.

A definite plan of procedure for dealing with cases neglected after advice from school, is a practical need.

The Hospitals at any rate in the provinces, cannot cope with the huge numbers of Medical, Surgical and of

Ophthalmic cases requiring treatment after inspection, and a large proportion are outside the scope of practice except that of club nature, which rarely provides for operative or ophthalmic treatment. Moreover, the very cases who most need treatment are often those who are unable to secure recommendation forms for hospital admission. The writer has gratuitously examined large numbers of such cases with defective sight, and prescribed spectacles, but that is no part of a scheme of inspection.

Until the passing of the new Act it was doubtful whether Authorities could pay for such work, involving as it does the question of treatment.

Now it appears likely that the Board may sanction such expenditure.

ADDITIONAL AGENCIES.

So far much has depended on the influence of the Teachers and the services of the Attendance Officers.

A school Nurse who shall follow up neglected cases in their homes, and explain the need of the case to parents, will no doubt help.

Voluntary agencies have before them a great field for usefulness, wherever public spirit suggests their formation. Home visitation, through such channels, would help to secure results for Inspection if properly and systematically carried out.

Provision of clothing, boots, and spectacles, in cases genuinely deserving of help has been made the object of voluntary efforts on the part of teachers, who might well be spared this tax on their resources, or their powers of providing remunerative charitable entertainments.

A great part of the physical weakness which one finds amongst school children, is due, like the high infant mortality rate, to improper feeding during very early life and to ignorance of household management—improper feeding oftener than insufficient feeding.

One step forward in the direction of a decreased infant mortality rate, and of less physical defect in the children would be taken in securing the instruction of all the senior girls in the schools in the *care and feeding of babies*. This cannot be done efficiently without the babies. I suggest that by taking babies in hand as material for teaching the girls we should be benefitting both. This is best accomplished by some form of *crêche*. The provision of *crêches* is not within the functions of a Board of Guardians, an Education Committee, or apparently any existing Authority. But, if voluntary effort pointed the way by finding the *crêche*, what is to prevent free nursing under a salaried head by the elder girls, as part of their school work, as much as cooking, washing, or household management? In industrial districts, where both parents go to work, the babies are necessarily put out to nurse, and for this regular payments are made. With such contributions by the parents, with nursing provided by a special teacher and girls' classes from the schools, the voluntary support required by a *crêche* would be a small matter, while much good would be done in dispelling ignorance, checking infant mortality, and improving the national physique.

Further enlightenment may teach the mothers of the next generation that they cannot be both efficient mothers and workpeople. Meanwhile we are called upon to do what we can for the children. It is hoped that the suggestions here set down, after some years

of practical experience in the development of Medical Inspection may be of assistance to those who are working with the object desired in the Board's Memorandum —the decrease of sickness and incapacity among children, and the ultimate decrease of inefficiency and poverty in after life, arising from physical disabilities; in other words, that these may have life, and have it more abundantly.

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